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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/916,566      | 07/27/2001  | Jyoti Mazumder       | POM-12502/29        | 1977             |

25006 7590 04/29/2003

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EXAMINER

FRANK, ELLIOT L

ART UNIT PAPER NUMBER

2125

DATE MAILED: 04/29/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

ppc

**Office Action Summary**

Application No.

09/916,566

Applicant(s)

MAZUMDER ET AL.

Examiner

Elliot L. Frank

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

- ✓ 1. The instant application claims CIP priority to multiple U.S. patent applications as well as priority to a provisional application. An examination of the parent applications shows that the requirements of claim 1 can be found in application number 09/107,912 now patent 6,122,564 A having a priority date of 1 June 1998, with the exception of the "Semiconductor Diode Laser" limitation of claim 1 which has a priority date of 27 July 2000 from the provisional application.

### ***Drawings***

- x 2. New formal drawings will be required subject to the allowance of this application. Figures 1-6 contain hand drawings and/or numbering. These drawings do not conform to the patent office requirements. While these drawings are acceptable for the analysis of the application, pending allowance the applicant is advised to employ the services of a competent patent draftsman outside the Office, as the Patent and Trademark Office no longer prepares new drawings.

### ***Specification***

- x 3. The abstract of the disclosure is objected to because it contains the purported merits of the invention. The abstract should be a 50-150 word summary of the invention. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities:
- a. Page 4, line 19: Drawing item numbers "20" and "30" cannot be located in figure 1.
  - b. Page 5, line 12 – The feedback controller should be drawing item number "104" not "80" per figure 1.
  - c. Page 5, line 13 – The numerical controller should be drawing item number "108" not "90" per figure 1.
  - d. Page 5, line 16: Drawing item numbers "20" and "30" cannot be located in figure 1.
  - e. Page 6, line 19: Drawing item numbers "301" cannot be located in figure 3.

Appropriate correction is required.

5. The errors noted by the examiner may not constitute all of the aberrations in the specification. The applicant is encouraged to thoroughly review the specification and correct any informality encountered.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kar et al. (USPN 6,526,327 B2).

The limitations of claim 1, and the applicable citations in Kar et al., are as follows:

1. A system for automatically controlling the build-up of material on a substrate (column 1, lines 4-15), comprising:

a controllable semiconductor diode laser having a beam directed to a localized region of the substrate so as to form a melt pool thereon (column 8, lines 44-49);

a material feeder for feeding material into a melt pool to be melted by the beam to create a deposit having a physical attribute (column 6, lines 10-41);

an optoelectric sensor operative to output an electric signal as a function of the physical attribute (column 4, lines 21-23); and

a feedback controller operative to automatically adjust the rate of material deposition as a function of the electric signal (column 6, line 63-column 7, line 13).

The limitations of claim 1 are read in entirety in Kar et al.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

USPN 5,449,536 A – Funkhouser et al. – Laser deposition system

USPN 6,046,426 A – Jeantette et al. – Laser deposition system with feedback

USPN 6,201,210 B1 – Sans I Ravellat et al. – Diode Laser system

USPN 6,211,080 B1 – Tatah – Laser deposition system

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USPN 6,504,127 B1 – McGregor et al. – Laser deposition system

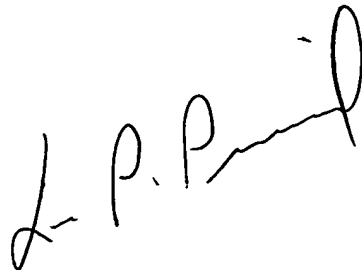
USPN 6,531,191 B1 – Notenboom – Laser deposition system

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elliot L Frank whose telephone number is (703) 305-5442. The examiner can normally be reached on M-F 7-4:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703) 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5484.

ELF  
April 25, 2003

A handwritten signature in black ink, appearing to read "L. P. Picard", with a stylized flourish at the end.

**LEO PICARD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**